

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (withdrawn): A cold trap, comprising:

cold trapping surfaces to prevent migration of lubrication molecules that are not deposited onto storage discs during a vapor lubrication process from a vapor lubrication station to adjacent process and/or transport chambers.

Claim 2 (withdrawn): The cold trap of claim 1, wherein the cold trapping surfaces prevent migration of the lubrication molecules to the adjacent process and/or transport chambers during transfer of the storage discs from upstream processes to the vapor lubrication station and/or during transfer of the storage discs from the vapor lubrication station to downstream processes.

Claim 3 (withdrawn): The cold trap of claim 1, wherein the cold trapping surfaces are held under low working pressure by means of high performance vacuum pumps.

Claim 4 (withdrawn): The cold trap of claim 3, wherein the cold trapping surfaces are cooled using refrigerants selected from the group consisting of liquid nitrogen, low-temperature refrigerant, cold water, and cold air.

Claim 5 (withdrawn): The cold trap of claim 3, further comprising:

one or more temperature sensors to sense the temperature of the cold trapping surfaces and to output a signal proportional to the sensed temperature; and

a control circuitry coupled to the temperature sensors to monitor the temperature of the cold trapping surfaces by receiving the signal from the temperature sensors, and

further to automatically shut-off the operation of the vapor lubrication station to prevent accidental migration of lubrication molecules in case of a failure in the cold trap.

Claim 6 (canceled)

Claim 7 (currently amended): A vapor lubrication station, comprising:
one or more cold traps to prevent migration of lubrication molecules that are not deposited onto storage discs during a vapor lubrication process from the vapor lubrication station into adjacent process chambers,
~~The vapor lubrication station of claim 6, wherein the adjacent process chambers comprise: said adjacent process chambers used to deposit successive layers onto the storage discs to produce discs, and/or transport chambers used in transporting the storage discs between the process chambers.~~

Claim 8 (canceled)

Claim 9 (canceled)

Claim 10 (currently amended): The vapor lubrication station of claim 67, further comprising:

one or more entry/exit ports disposed between the vapor lubrication station and/or the adjacent process chambers, wherein the one or more cold traps are disposed around the one or more entry/exit ports, respectively.

Claim 11 (original): The vapor lubrication station of claim 10, wherein the one or more entry exit ports comprise:

gates and/or valves that open and close to receive and output the discs.

Claim 12 (currently amended): The vapor lubrication station of claim 67, wherein the vapor lubrication station is held under low working pressure in the range of about 5×10^{-5} to 5×10^{-9} Torr by means of high performance vacuum pumps.

Claim 13 (currently amended): The vapor lubrication station of claim 67, wherein the cold traps comprise:

cold trapping surfaces to prevent migration of lubrication molecules that are not deposited onto the disc into the adjacent process chambers.

Claim 14 (original): The vapor lubrication station of claim 13, wherein the cold trapping surfaces are cooled to have a temperature in the range of about -195°C to 25°C using refrigerants selected from a group consisting of liquid nitrogen, low-temperature refrigerant, and cold water.

Claim 15 (original): The vapor lubrication station of claim 13, further comprising:

one or more temperature sensors to sense the temperature of the cold trapping surfaces and to output a signal proportional to the sensed temperature; and

a control circuitry coupled to the temperature sensors to monitor the temperature of the cold trapping surfaces by receiving the signal from the temperature sensors, and further to automatically shut-off the operation of the vapor lubrication station to prevent accidental migration of lubrication molecules due to a failure in the operation of the cold traps.

Claim 16 (withdrawn): A method of preventing migration of lubrication molecules into adjacent process chambers from a vapor lubrication station, comprising:

(a) trapping lubrication molecules that are not deposited onto storage discs during the vapor lubrication process in the vapor lubrication station using one or more cold traps including cold trapping surfaces.

Claim 17 (withdrawn): The method of claim 16, wherein trapping the lubrication molecules comprises:

(a)(1) trapping the lubrication molecules during transfer of the storage discs from upstream processes to the vapor lubrication station and/or further during transfer of the storage discs from the vapor lubrication station to downstream processes.

Claim 18 (withdrawn): The method of claim 16, further comprising:

- (b) sensing the temperature of the cold trapping surfaces;
- (c) monitoring the sensed temperature; and
- (c) shutting down the vapor lubrication station to prevent accidental migration of lubrication molecules into the adjacent process chambers based on the outcome of the monitoring.

Claim 19 (withdrawn): The method of claim 16, wherein cold trapping surfaces are cooled using refrigerants selected from the group consisting of liquid nitrogen, low-temperature refrigerant, cold water, and cold air.

Claim 20 (canceled)